I CLAIM:

1. A dispensing apparatus for dispensing fluids to a patient comprising:

(a) an outer housing;

(b) an expandable housing disposed within said outer housing, said expandable housing having a fluid reservoir provided with an inlet for permitting fluid flow into said fluid reservoir and an outlet for permitting fluid flow from said fluid reservoir;

(c) stored energy means disposed within said outer housing for exerting a force upon said first expandable housing to cause the fluid contained within said fluid reservoir to controllably flow through said outlet, said stored energy means comprising a constant force extension spring carried within said outer housing, said constant force extension spring being retractable to cause fluid flow from said fluid reservoir;

(d) fill means carried by said outer housing for filling said reservoir with the fluid to be dispensed; and

(e) dispensing means carried by said outer housing for dispensing fluid to the patient.

2. The apparatus as defined in claim 1 in which said expandable housing comprises a bellows structure having an accordion-like side wall and, said bellows

structure being movable from a substantially collapsed configuration to a substantially expanded configuration by fluid flowing into said fluid reservoir.

3. The apparatus as defined in claim 1 further including flow control means connected to said outer housing for controlling fluid flow between said reservoir and said dispensing means, said flow control means comprising a flow control member in fluid communication with said reservoir, said flow control member having a plurality of flow control channels.

4. The apparatus as defined in claim 1 in which said fill means comprises a first fill vial receivable within said outer housing.

5. The apparatus as defined in claim 1 in which said fill means comprises first and second fill vials receivable within said outer housing.

6. The apparatus as defined in claim 5 in which said second fill vial contains a diluent and a lyophilized drug

7. A dispensing apparatus for dispensing fluids to a patient comprising:

(a) an outer housing having first, second and third portions;

(b) an expandable housing disposed within said outer housing, said expandable housing having a fluid reservoir provided with an inlet for permitting fluid flow into said fluid reservoir and an outlet for permitting fluid flow from said fluid reservoir, said expandable housing comprising a bellows structure having an accordion-like side wall movable from a substan-

tially collapsed configuration to a substantially expanded configuration by fluid flowing into said fluid reservoir;

(c) stored energy means disposed within said second portion of said outer housing for exerting a force upon said inner expandable housing to cause the fluid contained within said fluid reservoir to controllably flow through said outlet, said stored energy means comprising a constant force extension spring carried within said outer housing said, said constant force extension spring being expandable by fluid flowing into said fluid reservoir and being retractable to cause fluid flow from said fluid reservoir;

(d) fill means carried by said outer housing for filling said reservoir with the fluid to be dispensed, said fill means comprising a vial carried within said third portion of said outer housing;

(e) dispensing means carried by said outer housing for dispensing fluid to the patient; and

(f) flow control means connected to said outer housing for controlling fluid flow between said reservoir and said dispensing means

8. The dispensing apparatus as defined in claim 7, in which said third portion of said outer housing includes:

(a) a fluid passageway;

(b) a first chamber for telescopically receiving said first fill vial; and

(c) an elongated support mounted within said first chamber, said elongated support having an elongated hollow needle, said hollow needle defining a flow passageway in communication with said fluid passageway.

9. The dispensing apparatus as defined in claim 7, further including a second fill vial carried within said third portion of said outer housing and in which said third portion of said outer housing includes:

(a) a fluid passageway;

(b) a first chamber for telescopically receiving said first fill vial;

(c) an elongated support mounted within said first chamber, said elongated support having an elongated hollow needle, said hollow needle defining a flow passageway in communication with said fluid passageway;

(d) a second chamber for telescopically receiving said second fill vial; and

(e) an elongated support mounted within said second chamber, said elongated support having an elongated hollow needle, said hollow needle defining a flow passageway in communication with said fluid passageway.

10. The apparatus as defined in claim 7 in which said third portion of said outer housing includes a cavity in communication with said inlet of said fluid res-

ervoir and in which said fill means comprises a pierceable septum disposed within said cavity.

11. The apparatus as defined in claim 7 in which said flow control means comprises a flow control assembly including:

(a) an outer casing disposed within said first portion of said outer housing, said outer casing having a plurality of circumferentially spaced apart fluid outlets in communication with said fluid reservoir;

(b) a flow control member mounted within said outer casing, said flow control member having a plurality of elongated flow control channels, each of said plurality of elongated flow control channels having an inlet and an outlet; and

(c) selector means rotatably connected to said second portion of said outer housing for rotating said flow control member.

12. The apparatus as defined in claim 11 in which said flow control assembly further comprises distribution means formed in said flow control member for distributing fluid from said fluid reservoir to each of said plurality of elongated flow control channels.

13. The apparatus as defined in claim 12, in which said flow control member is provided with an inlet passageway in communication with said fluid reservoir and in which said flow control assembly further includes filter means car-

ried by said flow control member for filtering fluid flowing toward said distribution means.

14. The apparatus as defined in claim 13 in which said distribution means comprises a plurality of radially extending flow passageways formed in said flow control member.

15. The apparatus as defined in claim 14 in which said first portion of said outer housing is provided with a fluid flow passageway and in which said selector means comprises a selector knob connected to said flow control member, said selector knob having finger gripping means for imparting rotation to said selector knob to align said outlet of a selected one of said elongated flow control channels with said fluid flow passageway in said first portion of said outer housing.

16. The apparatus as defined in claim 15, further including volume indicator means carried by said outer housing for indicating the volume of fluid remaining in said fluid reservoir.

17. The apparatus as defined in claim 15 further including disabling means carried by said outer housing for preventing fluid flow toward said dispensing means.

18. A dispensing apparatus for dispensing fluids to a patient comprising:

(a) an outer housing having first and second portions, said second portion having a cavity;

(b) an expandable housing disposed within said second portion of said outer housing, said expandable housing having a fluid reservoir provided with an inlet for permitting fluid flow into said fluid reservoir and an outlet for permitting fluid flow from said fluid reservoir, said expandable housing comprising a bellows structure having an accordion like side wall movable from a substantially collapsed configuration to a substantially expanded configuration by fluid flowing into said fluid reservoir;

(c) stored energy means disposed within said second portion of said outer housing for exerting a force upon said inner expandable housing to cause the fluid contained within said fluid reservoir to controllably flow through said outlet, said stored energy means comprising an expandable, contractible constant force spring carried within said outer housing;

(d) fill means carried by said first portion of said outer housing for filling said reservoir with the fluid to be dispensed, said fill means comprising a pierceable septum disposed within said cavity in said housing;

(e) dispensing means carried by said outer housing for dispensing fluid to the patient; and

(f) flow control means connected to said outer housing for controlling fluid flow between said reservoir and said dispensing means.

19. The apparatus as defined in claim 18 in which said flow control means comprises a flow control assembly, including at least one flow rate control plate having a flow channel formed therein.

20. The apparatus as defined in claim 18 in which said flow control assembly includes a plurality of flow rate control plates, each having a flow channel formed therein.

21. The apparatus as defined in claim 18 in which said flow control channel comprises a micro channel.

22. The apparatus as defined in claim 18 in which said flow control channel comprises a capillary.

23. The apparatus as defined in claim 18 in which said flow control channel is coated.

24. The apparatus as defined in claim 18 in which said flow control assembly comprises:

(a) an inlet manifold having an inlet port in communication with said fluid reservoir;

(b) an outlet manifold interconnected with said inlet manifold;

(c) a plurality of interconnected flow rate control plates interconnected with said inlet manifold, each said flow rate control plate having a micro channel formed therein; and

(d) selector means carried by said first portion of said outer housing for selectively bringing a selected one of said micro channels of a selected one of said flow rate control plates into communication with said dispensing means.

25. The apparatus as defined in claim 18 in which said flow control means comprises a flow control assembly including:

(a) an outer casing disposed within said outer housing;

(b) a flow control member having a plurality of elongated flow channels disposed within said outer casing; and

(c) distribution means formed in said flow control member for distributing fluid from said fluid reservoir to each of said plurality of elongated flow control channels; and

(d) selector means rotatably connected to said second portion of said outer housing for rotating said flow control member.

26. The apparatus as defined in claim 25, in which said flow control member is provided with an inlet passageway in communication with said fluid reservoir and in which said flow control assembly further includes filter means carried by said flow control member for filtering fluid flowing toward said distribution means.

27. The apparatus as defined in claim 26, further including volume indicator means carried by said outer housing for indicating the volume of fluid remaining in said fluid reservoir.

28. The apparatus as defined in claim 27 further including disabling means carried by said outer housing for preventing fluid flow toward said dispensing means.